118 A latch arrangement for an automotive door or other closure, comprising an electric motor coupled to a rotary driving and indexing member having at least one projection, at least one actuation member arranged to be driven by a respective projection from the driving and indexing member, a means for controlling the electric motor selectively to position the driving and indexing member and thereby to drive the at least one actuation member to perform a required action in the latch assembly for locking or unlocking the latch and a locking member mounted for movement between a locking position and an unlocking position, the indexing member is being coupled for selectively and independently driving the locking member, for electric door opening.

A latch arrangement according to Claim, wherein each projection and/or each 119 2. actuation member is resiliently displaceable at the point of mutual contact to follow a limited displacement after completion of the required actuation.

20 %. A latch arrangement according to Claim 1/2, in which each actuation member is spring-biased towards its point of contact with the projection from the driving and indexing member.

A latch arrangement according to Claim χ , wherein such arrangement is suitable for an automobile door or other closure, for releasably detaining a striker, the latch assembly further comprising: a latch bolt shaped to retain the striker at a latching position and to release the striker at an unlatching position of the latch bolt and means for locking and unlocking the locking member, the locking member being mounted for movement between a locking position at which the locking member retains the latch bolt in its latching position and an unlocking position at which the locking member allows the latch bolt to move to its unlatching position.

A latch arrangement according to Claim A, wherein the driving and indexing 120 8. member is coupled for selectively and independently driving the locking means, for electric locking and unlocking.

A latch arrangement according to Claim 1, in which the driving and indexing member is arranged to drive the means for locking the locking member and also the latch bolt, in Al

order to complete the closure of the door or other closure

A latch arrangement according to Claim 1, in which the driving and indexing member is arranged to selectively release the locking member to allow the door to open.

A latch arrangement according to Claim 5, in which over different phases of its rotary movement, the driving and indexing member selectively drives the locking and unlocing means and the latch bolt.

A latch arrangement according to Claim 1, in which the locking member is a pawl.

A rotary indexing mechanism for driving actuators in a latch arrangement according to Claim V. A

A latch arrangement for an automobile door or other closure, for releasably detaining a striker, comprising: a latch bolt shaped to retain the striker at a latching position and to release the striker at an unlatching position of the latch bolt; a locking member mounted for movement between a locking position, at which the locking member allows the latch bolt to move to its unlatching position; means for locking the locking member; and one electric motor with a driving and indexing output drive coupled for selectively and independently driving the locking member, for electric door opening, and also the locking means, for electric door locking and unlocking; wherein only the said one motor performs the function of door opening and door locking and unlocking.

A latch arrangement according to Claim, further comprising an electronic central locking arrangement for controlling the said electric motor to selectively lock and unlock the latch.

A latch arrangement according to Claim 1, further comprising at least one locking member release lever drivingly connectable to an external control and coupled to the locking member for releasing the locking member to allow door opening.

A latch arrangement according to Claim 17 further comprising a key mechanism drivingly coupled to the locking means for locking and unlocking the locking means manually.

A latch arrangement according to Claim 11, in which the locking member is a pawl.

A latch arrangement according to Claim 1, in which the driving and indexing output

A latch arrangement according to Claim, in which the driving and indexing output drive comprises a rotary indexing member having at least one projection, and at least two actuation members arranged to be driven by said projection, over different phases of rotary movement of the indexing member to selectively drive the locking member and the locking means respectively.

A1 cart.

A latch arrangement according to Claim 17, further comprising at least two locking member release levers drivingly connectable to respective external controls and coupled to the locking member for unlocking the locking member, and at least two respective coupling members, each selectively moveable between a coupling position at which the coupling member couples drive from the respective locking member release lever to the locking member, and a neutral position at which the coupling member does not; in which the electric motor is drivingly coupled through the indexing output drive to both coupling members for selective actuation thereof either separately or together, whereby controlled movement of the electric motor controls the selective coupling or decoupling of each said external control.

A latch arrangement according to Claim 17, further comprising an actuation member adapted to be connected, in use, to an interior door knob, and capable of being driven between a neutral position, at which the door is deadlocked because the door knob is operatively uncoupled from the locking means, and an active position, at which the door is not deadlocked and the door knob controls the locking means to lock or unlock the locking member; in which the electric motor driving and indexing output drive is coupled to the actuation member for selective deadlocking; wherein the motor performs the functions of door opening, door locking and unlocking and unlocking, and deadlocking control.

A latch arrangement according to Claim 17, in which the said electric motor driving and indexing output drive is arranged selectively and independently to drive the latch bolt, either by direct abutment or through a mechanical drive coupling, to effect completion of the closure of the latch bolt to complete closure of the door.

A latch arrangement according to Claim 1, in which every motor-driven function, is capable of being mechanically overridden by a corresponding manual mechanical drive.

REMARKS

Claims 1-117 have been cancelled. New Claims 1-20 have been added.

Claim 1 is believed to be novel and non-obvious over Matsumoto and Shimada, by virtue of the limitation in the claim to an electric motor-operated rotary driving and indexing member which controls door locking and unlocking as well as electric door opening. Prior art references disclose electrical central locking systems, with an electric motor controlling locking and unlocking, but the